III/185

ANNUAL REPORT

OF

THE ROYAL BOTANIC GARDEN, CALCUTTA, 1894-95.

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ANNUAL REPORT OF THE ROYAL BOTANIC GARDEN, CALCUTTA, FOR THE YEAR 1894-95.

No. 16G., of 1895, dated Darjeeling, the 13th May 1895.

From—GEORGE KING, Esq., M.B., LL.D., F.R.S., C.I.E., Superintendent, Royal Botanic Garden, Calcutta,

To—The Secretary to the Government of Bengal, Financial Department.

I HAVE the honour to submit herewith the 108th Annual Report of the Royal Botanic Garden, Calcutta.

ANNUAL REPORT OF THE ROYAL BOTANIC GARDEN, CALCUTTA, FOR THE YEAR 1894-95.

THE weather during the year presented no feature of note, except that the rainfall was rather below the average. The growth of the plants in the garden, both in the conservatories and in the open ground, was satisfactory; and very little damage was done by the storms of wind which are so frequent during the hot season. The chief improvements effected in the garden during the year were the remodelling of the intermediate conservatory, and the repair and alteration of the road which runs along the river-bank from the engine-house to the College gate. The conservatory just mentioned is the one standing between that in which the orchids are exhibited during their season and the Palm-house. It is intermediate not only in situation, but also in area, size, and height; being shorter and higher than the Orchid conservatory and smaller in exten and lower in the roof than the Palm-house. This intermediate conservatory, not having been interfered with for some years past, had become rather choked with overgrown plants. Occasion was therefore taken during the rainy season to clear it of its entire contents; and, this having been done, the Curator, Mr. R. L. Proudlock, laid it out on a new plan, far more artistic than the former one. All the choicest plants in the nurseries having been planted out in this house by the Assistant Curator, Mr. H. J. Davies, under Mr. Proudlock's direction, the result (after the plants have had a little time to establish themselves) should, I anticipate, be very satisfactory. In the whole of this large house there is not a single plant growing in a pot, everything being planted in the ground; the results of ground culture having, in the other conservatories, proved so much more satisfactory than those of pot culture. Hanging from the roof are a number of baskets containing plants, and its sides and also (in part) its roof are covered by creeping plants. The changes effected on the river bank road to which allusion has above been made consisted in bringing the whole to, as nearly as possible, a uniform level; in widening it; in removing the trees which formed an avenue on its northern side; and in improving the grassy slopes on each side of it. As the road is nearly a mile long, the labour involved in carrying out all these improvements was considerable. The earth required for raising its level and for widening it was taken mostly from the bed of the river, so that it was not necessary either to enlarge any of the ponds already existing in the garden or to excavate any new ones. The removal of the trees which formed the avenue along the northern edge of the road is a great improvement, as many new vistas have been opened up into the interior of the garden. And, by the addition of much soil from the river bed, long gentle slopes have been made leading down to the portions of the garden on each side which are, for the most part, on a lower level than the road. The roads in the part of the garden to the east of the river entrance are now in excellent condition; but much remains still to be done for the improvement of those to the west of that entrance, many of these being still in an unsatisfactory condition in several respects. Towards the end of the year, a good deal was done in the way of thinning and clearing out shrubs and trees in the eastern half of the garden. During the current season this process will be continued in the western half. Amongst the buildings erected

during the year by garden labour, and out of the garden budget allotment were a lodge for durwans near the river entrance, some godowns, a carpenter's and blacksmith's shed near the Curator's house, and a glass-roofed house in the nursery for the growth of such kinds of orchids as cannot stand the heavy rainfall of the monsoon months. More houses of the latter description are much wanted, and their construction should be undertaken as soon as funds become available. I had hoped, long before now, to have been able to chronicle the completion of the road leading from Calcutta to the garden *viâ* the Shalimar point and along the river-bank. I regret, however, that the road is still in an unfinished state. Visitors having on various occasions expressed the opinion that a Guide Book to the garden would be useful, I prepared, during the year, a little book of this sort which Government were pleased to print, and of which copies are now to be had by purchase at the garden gates. In order to make this Guide Book intelligible, it became necessary to name the various roads in the garden, the names chosen being in all cases those of Indian Botanists, or of Botanists to whom the garden or Herbarium are especially indebted. The Guide Book is furnished with a map, and, besides a description of the garden, it contains a brief sketch of its history since its foundation in 1786.

2. *Economic plants.*—Although no plant of economic interest attracted or received special attention during the year, there was, as usual, a considerable distribution of useful plants. Many hundreds of fruit trees were given to various applicants, mostly for public purposes; and applications for rhea plants (in the cultivation of which there has recently been a slightly revived interest) were also met as far as was possible.

3. *Herbarium.*—A large amount of work has been done in the Herbarium, many scientific references having been replied to, and plants having been named for various correspondents. The collection was increased by the receipt, during the year, of 13,119 specimens from other scientific centres, from botanists in India and in other parts of the world, and from collectors sent out from the garden. The chief donor was, as usual, the Director of the Royal Garden, Kew, who presented no fewer than 2,198 specimens. Dr. A. Henry, a missionary labouring in Formosa, sent 1,066 specimens of plants indigenous to that island. Mr. J. S. Gamble, Director of the Imperial Forest School, Dehra Dun, augmented his most liberal contributions of former years by the addition, during the past one, of 455 specimens. From Mr. N. Ridley, Director of the Botanic Garden, Singapore, 667, and from Mr. C. Curtis, Superintendent of the Botanic Garden, Penang, 46 specimens of Malayan plants were respectively received. Valuable contributions of Malayan plants were also received from Mr. L. Wray, Junior, Perak, and from Dr. J. D. Haviland, Borneo. Mr. Heinig, Deputy Conservator of the Sunderbans Forest Division, sent in 363 admirably preserved specimens of the flora of that region, while Mr. H. H. Haines, Deputy Conservator of Forests, Jalpaiguri, presented 56 specimens from the Bhutan Duars and Sikkim Terai. From Mr. M. Lawson, Government Botanist, Madras, there were received 356 specimens of Travancore plants. This was a particularly acceptable contribution, as the flora of Travancore was previously but poorly represented in the Herbarium. The veteran Botanist Baron Von Müller presented 237 Australian species. Of American plants there were received 603 plants from the Smithsonian Bureau of National Exchanges, Washington; 440 species from Mr. A. A. Heller, Louisville, South Texas; and 253 from Mr. C. G. Pringle, Mexico. Mr. Gustav Mann, for many years well known as Conservator of Forests in Assam, sent from Munich (where he has now settled) 251 specimens of orchids collected by him some years ago in the Assam Forests. From Mr. Medley-Wood, Superintendent of the Botanic Garden, Natal, there were received 328 plants, and from Mr. Duthie, Director of the Botanical Survey of Northern India, 128; while Dr. Prain, Curator of the Herbarium, sent 121 plants collected by him in Switzerland during his furlough. The collections made by the direct agency of the establishment were considerable, Mr. G. A. Gammie, Officiating Curator of the Herbarium, having collected 1,434 specimens; while Mr. E. H. Man, C.I.E., to whom this garden is indebted for most efficient help spread over many years, superintended the collection in the Andaman Islands of 847 specimens. From Upper Burma there were sent by Abdul Khoh (a native collector) 720 specimens; and by Mr. J. C. Prazer (an Eurasian collector) 150 specimens. In the neighbourhood of Gaya 334 specimens (chiefly of grasses) were

collected by a garden collector named Shaik Mokim; while Jonardan, the chief of the seed house, brought from the neigbourhood of Baidynath 169 specimens. Mr. R. Pantling, of the Cinchona Plantation, sent 546 specimens of orchids. On the other hand, no fewer than 15,539 specimens of carefully named Indian plants were distributed to scientific institutions and to private botanists in various parts of the world. The recipients of the largest numbers were the Director of the Royal Garden, Kew, to whom 2,044 specimens were sent; the Royal Herbarium, Berlin, to which 1,009 were issued; the Herbarium of the Jardin des Plantes, Paris, which received 545; and the Herbarium of the British Museum, London, to which 817 were sent. Other recipient institutions in Europe were the Herbaria at St. Petersburg, Vienna, Upsala, Leiden, Utrecht, Florence, Zurich, Fribourg, Cambridge, Edinburgh, Aberdeen, and the private Herbaria of M. M. De Candolle of Geneva and Drake de Castello of Paris. Amongst Asiatic institutions, specimens were sent to the Government Herbaria at Madras, Saharanpur, Dehra Dun, Peradeniya, Buitenzorg, Singapore, Perak and Penang. Lastly, contributions were sent to three American institutions, viz., the Smithsonian Institution, Washington, the Botanical Survey of Minnesota and the Herbarium presided over by Professor Sargeant; while one was sent to the University Herbarium at Melbourne in Australia.

4. *Botanical Publications.*—No volume of the Annals of this Garden was issued during the past year. The fifth volume has, however, been in active preparation, and will, it is hoped, be issued during the current year. An important paper *on Indian Convolvulaceæ* was contributed to the Journal of the Asiatic Society of Bengal by Dr. D. Prain, Curator of the Herbarium. In the same Journal there was also published the seventh part of my *Materials for a Flora of the Malayan Peninsula.* Dr. Cummins, of the Army Medical Staff, who worked for some time in the Herbarium as a volunteer, contributed to the same journal an account of a new species of *Lathræa* found by him near Gnatong on the Sikkim-Tibet frontier.

5. *Library.*—A few books were purchased during the year; and some presentations were received from Kew and from other scientific institutions to which contributions of Herbarium specimens and volumes of the Garden Annals had been sent.

6. *Interchange of Plants and Seeds.*—The living plants issued from the nurseries during the year amounted to 42,188 as against 22,553 plants received. Packets of seeds to the number of 3,059 were also issued, while 1,243 were received. Full details of these transactions will be found in the appendices to this report.

7. *Lloyd Botanic Garden, Darjeeling.*—The chief improvements carried out in this garden during the year were the improvement of some of the pathways and the reconstruction of the propagating house. As originally laid out, the walks were, from want of money, merely tracks cut in the soil with a layer of sand laid on the surface. Paths made after this fashion become very slippery during the rainy season; and, for some years past, Mr. Kennedy, the Curator of the garden, has been employing his labour-force whenever it could be spared in improving these paths by metalling them. A considerable instalment of this work was done during the past year, but a good deal still remains to be done to complete it. In rebuilding the propagating house only sál timber has been used; it is therefore hoped that no repairs will be necessary for some years. The ventilating arrangements of the large conservatory are still in a very unsatisfactory state. The Public Works Department have, however, undertaken to make them more efficient during the current year. The troublesome cock-chafer grub which worked such havoc in the garden some years ago has now, in a great measure, disappeared; and, with proper precautions in the application of manure, it is hoped it may soon do so entirely. Besides his garden duties, which he discharged with efficiency, Mr. Kennedy superintended the planting of trees along roads and in odd corners of ground within the station.

8. The budget allotments of funds for both the Calcutta and Darjeeling gardens were spent in full. The revenue derived from the sale of surplus plants and seeds amounted for the Calcutta garden to Rs. 1,274-5-0, and for the Darjeeling garden to Rs. 880, both of which sums were credited to Government revenue.

9. A few weeks after the opening of the year, Dr. Prain, Curator of the Herbarium, proceeded to England on furlough for eight months. His furlough was, however, subsequently extended to fourteen months. Since Dr. Prain's departure, the duties of Curator have been performed with much steadiness and efficiency by Mr. G. A. Gammie, of the Cinchona Department. Mr. R. L. Proudlock, Curator of the garden, worked with assiduity during the whole year, and to his skill and good taste the laying out of the intermediate conservatory is entirely due. Mr. G. T. Lane, Assistant Curator, was in charge of the out-door operations until November, when he was appointed to act as Superintendent of the Government gardens at Allahabad, in place of Mr. Phillips, who went on furlough. Mr. Lane worked cheerfully and well. Mr. H. J. Davies, who had been sent out from the Royal garden, Kew, a few weeks before the beginning of the year, was in November appointed to officiate for Mr. Lane, and has done excellent service. The chief writer, Babu Gopal Chandra Datta, and the other members of the office staff, have also worked to my satisfaction.

10. In the six appendices which accompany this report will be found full details of the receipts and issues of seeds and of living and dried plants.

APPENDIX No. I.

Statement showing plants received from 1st April 1894 to 31st March 1895.

From whom received.	Wardian cases.	Boxes.	Number of plants.
1	2	3	4
Royal Gardens, Kew, London	3	1	119
Botanic Gardens, Penang	1	1	75
Ditto, Saharanpur	...	2	1,626
Ditto, Darjeeling	...	16	2,034
Memorial Garden, Cawnpore	...	1	384
Government House Garden, Calcutta ...	...	...	7
Dr. A Henry, China	...	1	2
Messrs. F. Sander & Co., St. Albans, England	...	4	157
Agri-Horticultural Society of India, Calcutta	...	...	901
Ditto Garden, Rangoon ...	...	...	2
Ditto ditto, Lahore ...	...	...	104
Ditto ditto, Lucknow ...	...	...	151
La Martinière School, Calcutta	...	...	1
Conservator of Forests, Tavoy	1	...	10
Ditto, Dehra Dun ...	...	3	241
Deputy Conservator of Forests, Sunderbans ...	...	...	2
W. Alston, Esq., Jalpaiguri	...	4	186
H. G. Batten, Esq., Tavoy	1	2	633
Hon'ble J. Buckingham, C.I.E., Assam ...	...	1	30
W. Boxall, Esq., Rangoon	...	...	10
Dr. D. D. Cunningham, C.I.E., F.R.S., Calcutta	...	...	4
J. A. Gammie, Esq., Mungpoo	...	6	489
A. C. Hartless, Esq., „	...	...	50
E. H. Man, Esq., C.I.E., Port Blair ...	6	1	656
C. Maries, Esq., Gwalior	...	1	20
J. B. Menzies, Esq., Assam	...	4	358
Dr. R. D. Murray, Chittagong	...	1	20
R. Pantling, Esq., Mungpoo	...	1	589
J. Parkes, Esq., Kalimpong	...	3	1,208
G. McD. Peche, Esq., Moulmein ...	...	10	1,169
W. Penny, Esq., Assam	...	...	7
Mr. J. Prazer, Burmah	...	...	204
R. Rose, Esq., Allahabad	...	...	2
J. S. Slater, Esq., Engineering College ...	...	...	11
H. Sharman, Esq., Rajputana	...	1	2
C. H. Swindon, Esq., Calcutta	...	...	2
Dr. George Watt, C.I.E., M.D., Calcutta ...	...	...	6
Babu Soorjoo Deo Narayan Sing, Balegarh ...	...	1	5
„ J. C. Biswas, Calcutta	...	...	9
„ S. P. Chatterjee, Calcutta	...	...	1,012
George A. Gammie, Esq., collected in Sunderbans	...	...	49
R. L. Proudlock, Esq., collected in Sikkim ...	...	1	553
Abdool Kholil, collected in Burmah ...	...	3	6,012
Shaik Sader Mallic, thana Makosah ...	...	...	51
Unknown donors	...	2	550
G. Marshall Woodrow, Esq., College of Science, Poona	...	...	1,340
The Superintendent, Victoria Garden, Bombay	...	...	1,000
Ditto, Mysore Government Botanic Garden, Bangalore	...	...	500
Total ...	12	71	22,553

APPENDIX II.

Statement showing plants sent out from 1st April 1894 to 31st March 1895.

To whom sent.	Wardian cases.	Boxes.	Number of plants.
1	2	3	4
Royal Gardens, Kew, London ...	2	8	948
Botanic Garden, Penang	1	1	62
Ditto, Saharanpur	...	9	246
Memorial Garden, Cawnpore	...	3	44
Government House Garden, Calcutta ...	...	...	101
Belvedere Garden, Calcutta	...	...	174
Zoological Garden, Calcutta	...	...	532
Taj Garden, Agra	...	1	71
His Highness the Maharajah of Kuch Bihar	...	48	1,210
Captain J. G. Turner, His Excellency the Viceroy's Body Guard	...	...	15
The Right Hon'ble the Earl of Annesley, Ireland	...	1	67
Professor R. O. Cunningham, Belfast ...	...	1	66
J. Earle Drax, Esq., Dorsetshire ...	1	...	27
L. Ducasse, Esq., Natal	2	...	69
His Excellency Sir Arthur Havelock, G.C.M.G., &c., Colombo	1	...	30
Mrs. Patton, Moorcroft, Surrey, England ...	...	1	103
„ Robertson, Scotland	1	...	34
C. M. Salvago, Esq., Alexandria ...	3	...	77
Messrs. Hugh, Low & Son, Clapton Nursery, London	...	11	1,500
Messrs. F. Sander & Co., St. Albans, England	...	7	5,998
Agri-Horticultural Society of India, Calcutta	...	...	128
Ditto ditto, Lahore	...	4	105
Ditto ditto, Lucknow	...	12	260
Deputy Commissioner, Tavoy	1	...	46
Chief Commissioner, Andamans ...	1	...	47
Chief Commissariat Officer, Presidency Command, Calcutta	...	...	100
Deputy Conservator of Forests, Sundarbans...	...	...	599
Deputy Magistrate of Jalpaiguri ...	...	1	6
Sub-divisional Officer, Siwan, Saran ...	...	1	10
Ditto, Ranaghat	...	7	150
Subordinate in charge, Purulia sub-division ...	...	2	50
Secretary to the Howrah Municipality ..	...	...	30
Chairman, District Road Cess Committee, Lohardaga	...	3	80
Chairman, Municipality, Khulna ...	...	8	160
Ditto, Local Board, Samastipur ...	...	1	20
District Engineer, Bhagalpur	...	41	1,020
Ditto, Birbhum	...	13	327
Ditto, Burdwan	...	13	334
Ditto, B.-N. Railway, Chakradharpur	...	120	3,000
Ditto, Dinajpur	...	24	600
Ditto, Hazaribagh	...	4	66
Ditto, Hilli, Bogra district ...	...	4	100
Ditto, Hooghly	...	17	400
Ditto, Kaliaganj	...	4	100
Ditto, Nawabganj	...	8	200
Ditto, Noakhali	...	8	210
Ditto, Singhbhum	...	5	105
Ditto, 24-Parganas ...	...	...	965
Executive Engineer, Arrah Division, Arrah...	...	1	25

APPENDIX II—*continued.*

To whom sent.	Wardian cases.	Boxes.	Number of plants.
1	2	3	4
Executive Engineer, Chota Nagpur Division, Chakradharpur	...	16	400
Executive Engineer, Siwan	...	4	80
Superintending Engineer, Chinsurah ...	...	1	20
District Superintendent of Police, Arrah ...	...	4	80
Ditto ditto, Faridpur ...	...	4	100
Superintendent of Presidency Jail, Calcutta...	...	...	3,663
Ditto of Jail, Jessore	...	1	40
Ditto do., Jubbulpore ...	...	4	73
Ditto of Government School of Arts, Calcutta	...	...	126
Superintendent of the Civil Veterinary Department, Bengal, Calcutta	...	...	300
Superintendent of Horticultural, &c., Institution, Cossipore	...	...	6
Manager, Indian Husbandry Co., Ld., Calcutta	...	...	2,000
Ditto, Sanctoria Colliery, Giridih ...	...	3	26
Soldiers' Gardens, Fort William ...	...	...	1,020
Medical College Hospital, Calcutta ...	...	...	57
Eden Hospital, Calcutta	...	...	90
Howrah Hospital	...	...	62
Station Hospital, Dum-Dum	...	...	24
Medical Depôt, Calcutta	...	...	24
Civil Surgeon, Chapra	...	5	125
Chaplain of Howrah	...	...	303
St. Agnes' School, Howrah	...	...	100
St. John's Church, Calcutta	...	...	118
St. Vincent's Home, Kidderpore ...	...	...	50
La Martinière School, Calcutta	...	...	56
Church Mission Society, Calcutta ...	...	...	200
London Missionary Society, Bhawanipur ...	...	...	14
Bishop of Lucknow, Allahabad... ...	...	1	6
Thomason College, Roorkee	...	...	535
Eastern Bengal State Railway	...	2	50
Bengal-Nagpur Railway	...	4	61
Indian Museum, Calcutta	...	...	214
Royal Indian Marine Dockyard, Kidderpore	...	...	100
R. V. Aguilar, Esq., Shibpur	...	...	3
G. L. Anderson, Esq., Calcutta ...	...	...	20
Mrs. Barr, Residency, Indore	...	2	86
H. C. Bennertz, Esq., Calcutta ...	...	10	2,259
Mrs. Betts, Calcutta	...	...	2
A. Brownlow, Esq., Chittagong... ...	...	1	100
Revd. W. O. Connor, Purulia	...	2	23
Dr. D. D. Cunningham, M.D., F.R.S., Calcutta	..	...	122
H. J. Davis, Esq.	...	...	383
H. L. Fleury, Esq., Asansol	...	8	200
G. A. Gammie, Esq.	...	...	199
George Gellatly, Esq., Calcutta	...	...	20
J. Graham, Esq , Serampore	...	...	121
G. A. Grierson, Esq., Howrah	...	...	16
A. C. Hartless, Esq., Mungpoo	...	11	306
Mrs. A. A. Hedrick, Banda	...	4	100
Dr. Hendley, C.I.E., Jeypore	...	1	40
D. Herbert, Esq., Cachar	...	10	250
Revd. J. Jackson, Calcutta	...	...	1
W. W. Johnston, Esq., Malda	...	2	50
G. H. Loader, Esq , Jalpaiguri ...	...	3	76
Mrs. Lyall, Calcutta	...	...	430
Lady MacDonnell, Calcutta	...	...	150

APPENDIX II—*concluded.*

To whom sent.	Wardian cases.	Boxes.	Number of plants.
1	2	3	4
Mrs. Mackinnon, Calcutta	...	...	188
Revd. N. Madden	...	6	100
E. H. Man, Esq., C.I.E., Port Blair ...	2	...	75
Mrs. Maxwell, Howrah	...	...	300
J. B. Menzies, Esq., Mangaldaye ...	...	4	98
J. Monro, Esq., C.B., Ranaghat	...	9	252
R. Pantling, Esq., Mungpoo	...	11	1,121
Revd. G. H. Parsons, C.M.S., Nadia ...	...	...	100
F. E. Patteson, Esq., Calcutta	...	...	200
G. McD. Peche, Esq., Moulmein ...	...	1	2
G. W. Place, Esq., Chapra	...	1	24
J. Pratt, Esq., Midnapore	...	2	24
R. L. Proudlock, Esq.	...	...	5
Mrs. Ryland, Calcutta	...	...	380
,, Shaw, Engineering College ...	...	...	588
J. S. Slater, Esq., Engineering College ...	...	...	325
W. M. Smith, Esq., Madhupur ...	...	5	104
Hon'ble C. C. Stevens, C.S.I., Calcutta ...	...	...	1
S. A. Swaries, Esq., Howrah	...	...	24
Revd. H. Uffman, Purulia	...	12	265
E. V. Westmacott, Esq., Calcutta ...	...	...	78
Mrs. Williamson, Calcutta	...	...	350
A. G. M. Wodschow, Esq., Purnea ...	...	4	80
Babu Soorjoo Deo Narayan Sing, Balegarh...	...	2	23
,, A. C. Sen, Sibpur	...	...	2
,, B. B. Ghosh, Taki	...	...	6
,, B. D. Khan, Chandernagore ...	...	...	11
,, B. L. Sen Gupta, Calcutta ...	...	...	25
,, B. M. Banerjee, Sibpur	...	...	8
,, B. M. Roy, Raghunathpur ...	...	1	5
,, C. N. Nag Chowdhury, Calcutta ...	...	3	57
,, D. N. Bose, Sibpur	...	...	10
,, G. C. Roy Chowdhury, Calcutta ...	...	...	10
,, G. L. Mullick, Calcutta	...	...	2
,, H. N. Dass, Garden Reach ...	...	...	5
,, H. Lall, Sutna	...	1	17
,, J. Chakravarti, Magura	...	4	1,210
,, J. C. Biswas, Calcutta	...	...	1
,, J. G. Law, Calcutta	...	...	1
,, J. N. Chatterjee, Krishnagar ...	...	1	6
,, M. L. Samunta, Ooloobaria ...	...	...	100
,, P. B. Dutta, Calcutta	...	...	7
,, P. C. Ghosh, Calcutta	...	...	8
,, P. C. Shaha, Calcutta	...	...	60
,, R. D. Vurma, Kunderki	...	1	7
,, S. N. Pall Chowdhury, Krishnagore ...	...	1	6
,, S. P. Chatterjee, Calcutta ...	...	...	82
,, T. C. Chowdhury, Sibpur ...	...	...	1
Sayed Abdool Aziz, Metiabruz	...	...	3
Mier Mahamad Sahib, Murshidabad ...	...	...	3
Munshi Golam Nubbee Khan, Bhita ...	...	1	8
,, Syed Abdool Hayee, Birbhum ...	...	3	23
Faizullah Bhoyo, Calcutta ...	...	...	100
Total ...	15	568	42,188

APPENDIX III.

Statement showing seeds received from 1st April 1894 to 31st March 1895.

From whom received.	Number of parcels or packets.
W. T. Thiselton Dyer, Esq., F.R.S., C.M.G., Gardens, Kew, London	9
Directeur du Jardin Botanique, Saigon	27
Director, Imperial Botanic Garden, St. Petersburgh, Russia	52
Director, Royal Botanic Garden, Peradeniya, Ceylon ...	23
,, of Land Records and Agriculture, Calcutta ...	1
Botanic Garden, Adelaide	94
Ditto, Bangalore	4
Ditto, British Guiana	2
Ditto, Darjeeling	29
Ditto, Durban, Natal	17
Ditto, Glasnevin, Dublin	284
Ditto, Grenada	1
Ditto, Hongkong	1
Ditto, Jamaica	9
Ditto, Mauritius	20
Ditto, Saharanpur	34
Ditto, Singapore	10
Baron Sir Ferdinand Von Müller, K.C.M.G., F.R.S., University, Melbourne	58
Superintendent, Agri-Horticultural Society's Gardens, Madras	4
Superintendent, Agri-Horticultural Society's Gardens, Lahore	69
Superintendent, Zoological Gardens, Alipore ...	1
Secretary, Agri-Horticultural Society of India, Calcutta	1
Herbarium of the University of California ...	108
Conservator of Forests, Eastern Circle, Mandalay ...	1
District Forest Officer, Cuddapah ...	1
Extra Assistant Conservator of Forests, Sunderbans Division	2
Messrs. Damman & Co., Italy	33
,, Reasoner Brothers, Royal Palm Nurseries, Oneco, Floria, United States of America ...	48
Messrs. J. P. William Brothers, Heneratgoda, Ceylon	1
,, Begg Dunlop & Co., Calcutta	1
Army and Navy Auxiliary Co-operative Supply Company, London	1
Captain Currie, Belvedere	1
C. Curtis, Esq., Assistant Superintendent, Forest Department, Penang	12
Dr. F. Franceschi Santa Barbara, California ...	10
J. Sykes Gamble, Esq., Dehra Dun	42
G. A. Gammie, Esq., Sikkim	1
H. C. Hill, Esq., Offg. Inspector-General of Forests to the Government of India, Calcutta	1
Dr. A. F. R. Hœrnle, PH.D., Principal, Calcutta Madrassa	1
J. L. Lister, Esq., Pashok	3
E. H. Man, Esq., C.I.E., Port Blair	66
M. le Professor Max Cornu, Paris	1
J. Parkes, Esq., Nimbong	5
R. Pantling, Esq., Mungpoo	1
R. L. Proudlock, Esq., Sibpur	1
E. S. Rogers, Esq., Ruby Mines, Burma	2
George Watt, Esq., M.B., C.M., C.I.E., Reporter on Economic Products to the Government of India, Calcutta	143
G. Marshall Woodrow, Esq., College of Science, Poona	2
Miss Adams, La Martinière College, Calcutta ...	1
Babu B. Ghose, Lahore	2
Shaik Mokim, Plant Collector	2
Total ...	1,243

APPENDIX IV.

Statement showing seeds distributed from the Royal Botanic Garden during the year 1894-96.

To whom sent.	Number of parcels or packets.
W. T. Thiselton Dyer, Esq., F.R.S., C.M.G., C.I.E., Director, Royal Gardens, Kew, London ...	282
Directeur du Jardin Botanique, Saigon	23
Director, Botanic Garden, St Petersburgh, Russia ...	86
„ Royal, Botanic Garden, Peradeniya, Ceylon	18
Botanic Garden, Bangalore	10
Ditto, Buitenzorg, Java	22
Ditto, Cambridge	58
Ditto, Darjeeling	378
Ditto, Demerara	3
Ditto, Edinburgh	120
Ditto, Glasgow	4
Ditto, Glasnevin, Dublin	62
Ditto, Grenada	12
Ditto, Hongkong	9
Ditto, Innspruck, Germany	76
Ditto, Oxford	1
Ditto, Saharanpur	22
Ditto, Singapore	23
Ditto, Trinidad	3
Director, Department of Public Gardens and Plantations, Jamaica	7
Secretary, Agri-Horticultural Society of India, Calcutta	3
Secretary, Agri-Horticultural Society, Madras ...	24
Ditto, ditto, Rangoon ...	10
Assistant Secretary, Board of Revenue, Madras ...	1
Superintendent, Agri-Horticultural Gardens, Lahore ...	14
Ditto, ditto, Madras ...	1
Ditto, Government Horticultural Gardens, Lucknow	25
Ditto, Municipal Gardens, Karachi ...	8
Ditto, H. H the Nizam's Public Gardens, Hyderabad	8
Ditto, Taj and Government Gardens, Agra ...	3
Ditto, Victoria Gardens, Bombay ...	26
Ditto, Zoological Gardens, Alipore ...	1
Ditto, Cossipore Practical Institution of Horti-Flori-Agriculture, Cossipore	2
Proprietor, Dum-Dum Nursery, Dum-Dum ...	2
District Engineer, Birbhum	7
Ditto, Lohardaga	5
Ditto, Manbhum	9
Ditto, Pabna	8
Ditto, Palamau	12
Ditto, Singhbhum	12
Executive Engineer, 2nd Division, Bari Doab Canal, Amritsar	1
Ditto, Balasore Division, Balasore ...	4
Ditto, Public Works Department, Mussoorie	6
Ditto, Shwebo Division, Shwebo, Burma	1
Resident Engineer, B. G. I. P. Railway, Dhola, Kathiawar	9
Assistant Engineer, B.-N. Railway, Jharsagra ...	3
Ditto, No. 2 Sub-division, Samastipur ...	1
Overseer, Public Works Department, Ranchi ...	3
Sub-Overseer, Burhee, Chota Nagpur	9
Ditto, District Board, Sirajganj	6
Supervisor, Hazaribagh	5
Subordinate, Public Works Department, in charge Kendra Sub-division, Kendra, Gobindpur ...	12
M. le Conservateur, Jardin Botanique, Geneve, Switzerland	54
Conservator of Forests, Central Circle, Madras ...	1

APPENDIX IV—*continued.*

To whom sent.	Number of parcels or packets.
Sub-divisional Officer, Bhola	1
Ditto, Goalundo	1
Ditto, Jowai	1
Ditto, Kishorganj	1
Ditto, Manickganj	1
Ditto, Jamalpur, Mymensingh ..	1
Ditto, Madaripore	1
Ditto, Munshiganj	1
Ditto, Netrokona	1
Ditto, Narainganj, Dacca	1
Ditto, Patuakhali	1
Ditto, Siwan, Saran	2
Ditto, Tangail	2
Superintendent, Palamau Jail, Palamau	1
Ditto, Jessore Jail, Jessore	1
Ditto, Saran Jail, Chapra	1
Ditto, Puri Jail, Puri	1
Ditto, Central Jail, Midnapore	1
Ditto, Central Jail, Bhagalpur ...	1
Divisional Forest Officer, Jerruck, Hyderabad ...	2
Assistant Registrar, Punjab University, Lahore ...	1
First grade Hospital Assistant, Aurangabad, Deccan ...	2
Chairman, District Board, Partabgarh .	2
Vice-Chairman, Town Committee, Cooch Behar ...	12
Messrs. Andrew, Yule & Co., Calcutta	1
„ Balmer, Lawrie & Co., Calcutta	1
„ H. Low & Co., Clapton Nursery, London ...	3
„ Reasoner Brothers, Oneco, Florida ...	13
„ F. Sander & Co., St. Albans, England ...	5
„ J. P. William and Brothers, Heneratgoda, Ceylon	11
The Most Noble the Marquis of Lansdowne, K.G., Bowood, Somersetshire	114
Baron Sir Ferdinand Von Müller, K.C.M.G., F.R.S., Melbourne	90
Cantonment Magistrate, Rangoon	1
Officiating District Judge, Chittagong	1
Principal, Government College, Ajmere	3
Ditto, Forest Officer, Nikosia, Cyprus ...	5
Inspector of Salt and Abkari Revenue, Manikpatna, Puri	4
Inspector of Salt and Abkari Revenue, Konda, Vizagapatam	2
Postmaster, Diamond Harbour	45
Sir A. J. Arbuthnot, K.C S.I., London	48
Colonel Abbott, Jodhpur House, Abu	10
Miss Adams, La Martinière, College, Calcutta ...	1
M. J. Bharwada, Esq., Gondal, Kathiawar ...	13
Dr. Bower, Glasgow	34
C. Curtis, Esq., Forest Department, Penang ...	3
H. R. H. Coxe, Esq., Puri	1
H. J. Davies, Esq., Sibpur	23
Paul Dietel, Esq., Calcutta	96
Revd. W. Diller, Chaibassa	16
H. C. Ferard, Esq., C.S., Banda	1
Dr. F. Franceschi, California	139
J. Sykes Gamble, Esq., Dehra Dun	6
G. A. Gammie, Esq., Sibpur	47
J. Gammie, Esq., Mungpoo	21
Major M. A. Gray, Shillong	4
M. Edouard Guillaume, Paris	4
A. C. Hartless, Esq., Mungpoo	27
Mrs. Hodges, Mhow, C. I.	8
T. Hanbury, Esq., Ventimiglia, Italy ...	3
W. W. Johnson, Esq., Hayatpur	2
G. T. Lane, Esq., Allahabad	126
H. Ledgard, Esq., Cawnpore	1
Revd. A. Logsdail, Chaibassa	1

APPENDIX IV—*concluded.*

To whom sent.	Number of parcels or packets.
P. V. Luke, Esq., Calcutta	1
Revd. A. J. McLean, Chittagong	1
C. Maries, Esq., Gwalior	11
E. H. Man, Esq., C.I.E., Port Blair	1
J. B. Menzies, Esq., Kalaigaon, Mangaldai ...	23
W. T. Marshall, Esq., J. P. Patterdale Hall, England	79
C. Noble, Esq., Sunningdale, London ...	6
M. le Naudin, Antibes, France	1
A. Perry, Esq., Winchmore Hill, London ...	34
R. Pantling, Esq., Mungpoo	62
S. Robson, Esq., Bankipore	3
R. Rose, Esq., Allahabad	9
M. Scowen, Esq., Colombo, Ceylon	2
W. N. Sealy, Esq., Gorakhpur	8
C. H. Shinn, Esq., Berkeley, California ...	6
Dr. Hans Schinz, Zurich, Switzerland ...	81
S. O. Smith, Esq., Agra	1
Surgeon-Lieutenant-Colonel R. N. Stoker, Dharmsala	16
F. W. K. Von Vyburg, Esq., Bombay ...	2
W. M. Thorburn, Esq., C.S., Kurnool ...	3
George Watt, Esq., M.B., C.M., C.I.E., Reporter on Economic Products to the Government of India, Calcutta	4
G. W. Wilson, Esq., Heatherbank, London ...	93
G. Marshall Woodrow, Esq., Poona	12
Miss Wharton, Allahabad	1
Colonel H. Wylie, C.S.I., Katmandu, Nepal ...	2
Arthur Young, Esq., Cyprus	5
Rajah of Khaira, Monghyr	1
Pundit Mohur Singh, Dehra Dun	1
Krishnarao Jeshwant Jog, Tasgaon	1
Sahibzada Nooroodeen Khan, Russapagla ...	8
Manickji Meherwanji, Bilimoria, Esq., Bombay ...	4
Babu Devendranath Basu, Sibpur	20
„ Gopal Chandra Datta, Sibpur	26
„ Hem Chandra Banerjee, Sibpur ...	3
„ Jadub Chandra Biswas, Calcutta ...	3
„ Jatta Dhary Ghosh, Sibpur	20
„ Kanti Bhusan Banerjee, Motihari ...	1
„ Pulin Behary Dutt, Calcutta	10
„ Satcowri Deb, Calcutta	1
„ Upendra Nath Mitter, Andul	4
Total ...	3,059

APPENDIX V.

List of Herbarium specimens received during the year 1894-95.

	Number.
The Director, Royal Garden, Kew	2,198
Dr. A. Henry, Formosa	1,066
J. Sykes Gamble, Esq., Dehra Dun	455
R. L. Heinig, Esq., Sunderbans	363
H. H. Haines, Esq., Jalpaiguri	56
J. F. Duthie, Esq., Director, Botanical Survey, N. India	128
Hemp Drugs Commission	13
S. Robson, Esq., Mussoorie	47
Dr. Brazier-Creagh, Karachi	58
J. Davies, Esq., Kuram Valley	9
Major Burn-Murdoch, R.E., Shillong	6
R. Rose, Esq., Allahabad	3
S. Fraser, Esq., Darjeeling	1

APPENDIX V—*concluded.*

	Number.
W. C. Taylor, Esq., Orissa	1
A. Smythies, Esq., Forest Department, Assam ...	3
W. A. Talbot, Esq., Forest Department, Kanara ...	4
M. A. Lawson, Esq., Director, Botanical Survey, Madras	356
P. Lancaster, Esq., Calcutta	1
Surgeon-Captain D. Prain, Curator of the Herbarium .	121
G. Mann, Esq., Munich	251
Baron Von Müller, Melbourne	237
Director, Botanic Garden, Buitenzorg, and Mr. Koorders, Conservator of Forests	706
J. D. Haviland, Esq., Borneo	272
H. N. Ridley, Esq., Singapore	667
J. Medley-Wood, Esq., Natal	328
L. Wray, Esq., Junior, Perak	222
C. Curtis, Esq., Penang	46
Smithsonian Bureau of Exchanges, Washington, U.S.A.	603
Mr. C. G. Pringle, Mexico	253
Mr. A. A. Heller, S. Texas	440
Collected Departmentally.	
G. Gammie, Esq., in Assam ... 1,434	
E. H. Man, Esq., C.I.E., in the Andamans 847	
R. Pantling, Esq., in Sikkim 546	
J. Gammie, Esq., ditto 4	
W. A. Kennedy, Esq., Darjeeling ... 1	
J. C. Prazer in Burmah 150	
Abdul Koloel ditto 720	
Shaik Mokim in Bengal 334	
Jonardun Lushker ditto 169	
— 4,205	
Total 13,119	

APPENDIX VI.

List of Herbarium specimens distributed during the year 1894-95.

		Number.
Herbarium,	Royal Garden, Kew	2,044
Ditto,	Imperial Garden, St. Petersburgh ...	289
Ditto,	University, Edinburgh	239
Ditto,	ditto, Florence	368
Ditto,	Madras	204
Ditto,	University, Utrecht	234
Ditto,	ditto, Upsala	183
Ditto,	ditto, Cambridge	212
Ditto,	Smithsonian Institution, Washington, United States of America ...	516
Ditto,	Singapore	667
Ditto,	Royal Museum, Berlin	1,009
Ditto,	Botanic Garden, Vienna	188
Ditto,	Imperial Museum, Vienna ...	222
Ditto,	Botanic Garden, Peradeniya, Ceylon ...	239
Ditto,	Jardin des Plantes, Paris	545
Ditto,	Perak	476
Ditto,	Botanical Survey of Northern India ...	424
Ditto,	Penang	420
Ditto,	University, Aberdeen	329
Ditto,	Melbourne, Australia	241
Ditto,	University, Leiden	564
Ditto,	M. A. deCandolle, Geneva ...	641
Ditto,	British Museum, London	817
Ditto,	Minneapolis, Minnesota, U.S.A. ...	72
Ditto,	Botanic Garden, Buitenzorg, Java ...	424
Ditto,	Owen's College, Manchester ...	181
Ditto,	College of Science, Poona	182
Ditto,	Friburg	474

	Number
J. Sykes Gamble, Esq., Dehra Dun	128
W. A. Talbot, Esq., Kanara	105
Botanic Garden, Natal	269
Herbarium, Queen's College, Cork	122
Natural History Survey, Minnesota, U.S.A. ...	177
H. C. Levinge, Esq., Ireland	515
Dr. Hans Schinz, University, Zurich	566
M. Drake de Castello, Paris	577
Sir William Roberts, M.D., F.R.S., London ...	400
Professor Sargeant, U.S.A.	202
R. Pantling, Esq., Mungpoo, Kurseong ...	93
Dr. G. Watt, Calcutta	10
Professor Reefs, Botanischer Garten, Erlangen, Germany	8
C. Ford, Esq., Botanic Garden, Hongkong ...	2
Dr. T. Cooke, Imperial Institute, London ...	57
A. C. Hartless, Esq., Labdah, Mungpoo ...	1
Total ...	15,530

G. KING, M.B., *Brigade-Surgeon-Lieut.-Col*
Superintendent, Royal Botanic Garden, Calcutta.

W. H. McG.—Reg. No. 835J—630—20-5-05.

FINANCIAL DEPARTMENT.

MISCELLANEOUS

DARJEELING, THE 14TH JUNE 1895.

RESOLUTION.—No. 156T.—F.

READ—

The Report of the Royal Botanic Garden, Calcutta, for the year 1894-95.

Among the principal improvements effected during the year in the garden, which has now for a number of years been a most popular resort, may be mentioned the entire remodelling of one of the conservatories, which has been laid out on a new and more artistic plan. The road running along the river bank from the engine-house to the gate of the Sibpur College has been considerably improved, and several small buildings and a glass-roofed house for certain orchids have been erected by garden labour. Dr. King's singular talent for landscape gardening has enabled him, during the 24 years he has been in charge, to add greatly to the beauty of the garden by skilful grouping of trees and shrubs, and it now ranks high among similar institutions for picturesque scenery no less than for scientific completeness. Within the past year he has laid the public under a further obligation by bringing out a Guide to the garden, the want of which had been long felt. The book contains a map, a description of the garden, and a brief sketch of its history since its foundation in 1786, and copies can be had by purchase at the garden gates, and from Messrs. Thacker, Spink and Company, booksellers, Calcutta.

2. The Herbarium attached to the garden received material additions during the year; more than 13,000 specimens were added to it, illustrating the flora of England, Switzerland, the United States, Mexico, the Malay Archipelago, Borneo, Formosa, Australia, Natal, Assam, Northern India, Travancore and the Andaman Islands. To the contributors of these specimens, Mr. Thiselton Dyer, Dr. Prain, the Smithsonian Bureau of National Exchanges, Mr. Heller, Mr. Pringle, Mr. Wray (junior), Mr. Ridley, Mr. Curtis, Dr. Haviland, Dr. Henry, Baron von Müller, Mr, Medley-Wood, Mr. Gustav Mann, Mr. Duthie, Mr. Gamble, Mr. Lawson, and Mr. E. H. Man, C.I.E., the thanks of Government are due. Nearer home, Messrs. Heinig and Haines, Deputy Conservators of Forests, contributed to the garden valuable specimens of the flora of the Sunderbans, the Bhutan Duars, and the Sikkim Terai; and the Lieutenant-Governor will be glad to see more officers of the Forest Department in Bengal cultivate botanical research and assist the garden by their collections. The collectors employed by the Calcutta garden have also added some valuable contributions A large number of specimens was sent out from the garden to various botanical institutions in Europe, America, Australia, the Straits Settlements and in India.

3. Of the Lloyd Botanic Garden at Darjeeling there is apparently little or nothing to record. The report does not state how far it fulfils the purpose for which it was originally established, of bringing together in one place those specimens of the indigenous flora of the Eastern Himalayas which can be grown at the elevation of Darjeeling. Fuller information on this point should be given in future reports.

4. The Lieutenant-Governor desires to acknowledge the excellent work done by Dr. King during the past year, and to express his unqualified satisfaction that this Province has secured the retention of his services for at least two additional years.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Government of Bengal.

No. 157T.—F.

Copy forwarded to the Superintendent, Royal Botanic Garden, for information.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Government of Bengal.

Darjeeling,
The 14*th June* 1895.

Reg No. 1833C—460—25-6-95.